

## **EXCLUSION REQUEST NO. 8**

**a.     Product Name:**       Hot-Rolled High Flange-Formability Steel  
   HTSUS Classification: 7208.39.0015

**b.     Technical Description:**

Hot-Rolled High Flange-Formability Steel is a type of hot-rolled steel that is used in the production of automotive parts (*i.e.*, suspension links and suspension members) on account of its excellent punching quality. NSC seeks product exclusions for varieties of this product meeting the following product characteristics:

<b>Variety 1</b>	<u>chemical composition:</u> carbon content up to 0.25%, by weight; silicon content up to 1.00%, by weight; manganese content up to 2.00%, by weight phosphorus content up to 0.050% ,by weight sulfur content up to 0.020% ,by weight titanium content up to 0.10% ,by weight <u>physical &amp; mechanical properties:</u> thickness range of 1.400 to 6.000 mm (inclusive); minimum tensile strength (MPA) of 440(N/mm <sup>2</sup> ); if 1.2 mm to 1.59 mm thickness range; yield point (MPA) : 295≤410(N/mm <sup>2</sup> ); elongation: 28≤41(%) if 1.6 mm to 1.99 mm thickness range; yield point (MPA) : 285≤400(N/mm <sup>2</sup> ); elongation: 29≤42(%) if 2.0 mm to 2.49 mm thickness range; yield point (MPA) : 275≤390(N/mm <sup>2</sup> ); elongation: 30≤43(%) if 2.5 mm to 3.19 mm thickness range; yield point (MPA) : 275≤390(N/mm <sup>2</sup> ); elongation: 32≤45(%) if 3.2 mm to 3.99 mm thickness range; yield point (MPA) : 265≤380(N/mm <sup>2</sup> ); elongation: 33≤46(%) if 4.0 mm to 6.0 mm thickness range; yield point (MPA) : 265≤380(N/mm <sup>2</sup> ); elongation: 34≤47(%) <u>Burring Test:</u> 100% Min.
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<b>Variety 2</b>	<p><u>chemical composition:</u></p> <p>carbon content up to 0.25%, by weight;          silicon content up to 1.00%, by weight;          manganese content up to 2.00%, by weight          phosphorus content up to 0.050% ,by weight          sulfur content up to 0.020% ,by weight          titanium content up to 0.10% ,by weight</p> <p><u>physical &amp; mechanical properties:</u></p> <p>thickness range of 1.600 to 6.000 mm (inclusive);          minimum tensile strength (MPA) of 540(N/mm<sup>2</sup>);          if 1.6 mm to 1.99 mm thickness range;              yield point (MPA): 375≤510(N/mm<sup>2</sup>);              elongation: 22≤36(%)          if 2.0 mm to 2.49 mm thickness range;              yield point (MPA) :365≤500(N/mm<sup>2</sup>);              elongation: 23≤37(%)          if 2.5 mm to 3.19 mm thickness range;              yield point (MPA) : 365≤500(N/mm<sup>2</sup>);              elongation: 23≤37(%)          if 3.2 mm to 3.99 mm thickness range;              yield point (MPA): 355≤490(N/mm<sup>2</sup>);              elongation: 24≤38(%)          if 4.0 mm to 6.0 mm thickness range;              yield point (MPA): 355≤490(N/mm<sup>2</sup>);              elongation: 24≤38(%)</p> <p><u>Burring Test:</u> 80% Min.</p>
<b>Variety 3</b>	<p><u>chemical composition:</u></p> <p>carbon content up to 0.20%, by weight;          silicon content up to 1.20%, by weight;          manganese content up to 2.30%, by weight          phosphorus content up to 0.050% ,by weight          sulfur content up to 0.020% ,by weight          titanium content up to 0.20% ,by weight</p> <p><u>physical &amp; mechanical properties:</u></p> <p>thickness range of 1.600 to 6.000 mm (inclusive);          minimum tensile strength (MPA) of 590(N/mm<sup>2</sup>);          if 1.6 mm to 1.99 mm thickness range;              yield point (MPA) :460≤610(N/mm<sup>2</sup>);              elongation: 17≤31(%)          if 2.0 mm to 2.49 mm thickness range;              yield point (MPA) :450≤600(N/mm<sup>2</sup>);              elongation: 18≤32(%)          if 2.5 mm to 3.19 mm thickness range;              yield point (MPA) : 450≤600(N/mm<sup>2</sup>);              elongation: 18≤32(%)</p>

	if 3.2 mm to 3.99 mm thickness range; yield point (MPA) : $440 \leq 590$ (N/mm <sup>2</sup> ); elongation: $19 \leq 33$ (%) if 4.0 mm to 6.0 mm thickness range; yield point (MPA) : $440 \leq 590$ (N/mm <sup>2</sup> ); elongation: $19 \leq 33$ (%) <u>Burring Test</u> : 75% Min.
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**c. Basis for Exclusion Request:**

The above noted varieties of Hot-Rolled High Flange-Formability Steel should be excluded from any Section 203 restrictions because Hot-Rolled High Flange-Formability Steel cannot be produced in the United States. Indeed, NSC has applied for a patent on this product, which has excellent press formability. *See* International Application No. PCT/JP00/08934: “High Fatigue Strength Steel Sheet Excellent in Burring Workability and Method for Producing the Same.” NSC is not aware of any substitute products that are commercially produced in the United States.

**d. Names and Locations of Any Producers:**

NSC is the only producer of this product.

**e. Total U.S. Consumption:**

[

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NSC has estimated [

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	2001	2002	2003	2004	2005
<b>Qty (ST)</b>	[				]
<b>Value US \$</b>	[				]

**f. Total U.S. Production:**

As noted above, there is no U.S. production of this product.

**g. U.S.-Produced Substitute, Total U.S. Production of Substitute, and the Names of Any U.S. Producers of the Substitute:**

NSC is unaware of any U.S.-manufactured steel products that are commercially-viable substitutes for Hot-Rolled High Flange-Formability Steel.

[Public Exclusion Request No. 8~Hot-Rolled Flange-Formability Steel.doc](#)